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BY METALS CAST VS
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YEAR 1963

	NO SPECIFIC METALS	GRAY IRON	DUCTILE IRON	MALLEABLE IRON	STEEL	ALUMINUM	BRASS, BRONZE & COPPERBASE	MAGNESIUM	ZINC	OTHER METALS	TOTALS
MANAGEMENT	79										79
MARKETING	23	4	3	3	4		2				39
PATTERNS & COREBOXES	14										14
SAND CONDITIONING	36	18					2				56
SAND MOLDING	35	21	2		17		7				82
CORES & COREMAKING	24	2			3						29
GATING & RISERING	5				22	4	2				33
PERMANENT MOLD CASTING						33				6	39
DIE CASTING	35								16		51
OTHER CASTING PROCESSES	10	6	6								22
METALLURGY	11	32	41	17	41	38	8			5	193
MELTING	3	16	8		19						46
HEAT TREATMENT			6		26						32
CLEANING & FINISHING	9	3	3								15
QUALITY CONTROL	4	26	3	2	15	5	5	4			64
TESTING	17	4				8	11				40
MECHANIZATION & AUTOMATION		3	5	2	4						14
MATERIALS HANDLING	9										9
MAINTENANCE	6			2							8
OTHER	98					3					101
TOTAL	418	135	77	26	151	91	37	4	16	11	966

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